The Success of AIS Vigilance

n late May, FWP workers at a check station discovered small clamlike creatures on two construction barges that had arrived from Michigan for a cleanup project at Whitefish Lake.

The animals were zebra mussels. If allowed to gain a foothold in Montana, they could damage water-based recreation, ecosystems, and businesses across the state.

Fortunately, FWP's inspection program discovered the mussels before they had a chance to spread.

Zebra mussels are small mollusks native to Eastern Europe. Since first arriving on this continent in the early 1980s, they have wreaked havoc on lake and reservoir systems across the United States.

In one Kansas reservoir, the zebra mussel population exploded during the mid-2000s. In just three years, billions of the thumbnail-sized creatures covered every rock, log, and fishing pier in the reservoir. They ate up much of the zooplankton that forage fish need. As a result, game fish size and condition declined. Anglers began complaining about catching skinny walleye.

In Montana, we like our walleye plump.

That's one reason we are dead serious about keeping zebra mussels and other aquatic invasive species (AIS) out of this state's waters—and about preventing those already here from spreading further.

Containing the spread is an enormous task. AIS are spread by boats, engines, wading boots, and other gear used by mobile an-



glers, boaters, fisheries workers, bridge and dam contractors, and irrigators. People using Montana waters move to and from other Montana waters. And each year thousands of boaters, contractors, and anglers enter Montana from other states' lakes and rivers.

The stakes are huge. Like other invasives, zebra mussels lack natural predators to keep numbers in check. They jam boat engines, block water-intake pipes used by industries, clog irrigation systems, and disrupt water purification systems and hydropower plants. They also consume food and oxygen needed by native organisms. When they overpopulate and die, the mussels foul beaches with a putrid stench and razor-sharp shells.

Other serious AIS threats include:

▶ VHS virus, in the Great Lakes since 2005, causes large die-offs of warmwater species. ▶ Silver and bighead carp have spread north up the Mississippi River to tributaries such as the Ohio, Illinois, and lower Missouri Rivers. If they reach the Yellowstone, the

oversized minnows could outcompete paddlefish, sauger, and sturgeon.

▶ Eurasian watermilfoil forms thick underwater plant beds that clog irrigation canals, block boating lanes, and render swimming areas unusable. The plant already occupies hundreds of acres of Noxon and Cabinet Gorge Reservoirs and has shown up in the Jefferson River and Fort Peck Reservoir.

Montana is fighting AIS on several fronts. You've likely seen the "Inspect. Clean. Dry." message on billboards and FWP vehicle tailgates. These and other public awareness efforts urge boaters to check their boats, boots, and other gear for mud, water, and plants that could carry AIS, and then to clean off all mud and vegetation before drying the gear to kill residual alien organisms.

Early detection is critical. By finding these species early, we have a much better chance of containing their spread.

That's what is happening at Whitefish Lake. FWP workers inspect and decontaminate barges, docks, tugboats, and other large pieces of equipment coming in from across the United States as part of an Environmental Protection Agency cleanup project. The goal of that inspection program is to ensure that no invasive species accidentally enter Whitefish Lake. So far, it's working.

Other AIS inspections are taking place elsewhere in Montana. Since mid-May, 45 FWP watercraft inspectors at 13 check stations have been examining watercraft near border crossings and on major travel routes.

In addition, the Montana Department of Agriculture and Department of Natural Resources and Conservation are cooperating closely with FWP on inspections and other AIS management efforts.

It requires a massive amount of work and coordination to keep zebra mussels and other AIS out of Montana waters. But that's what it takes, by FWP and everyone else who cares about lakes, reservoirs, and rivers. Otherwise a few pesky critters could quickly become a nightmare that all of us would have to live with for a very long time.



Inspection is critical to keep AIS like zebra mussels from entering or spreading within Montana.

-Joe Maurier, Montana FWP Director